14. **(Twice Amended)** The image-forming process according to claim 8, wherein an average roughness Ra of a center line of the surface layer is in a range of 0.01 to 0.9 μm, and

wherein an average inclination Δa of a roughness curve f(x) is in a range of 0.001 to 0.06, as defined by the following equation:

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point of a curve extending a distance x in an X direction, and ℓ is a length of the curve.

~~15.~~ 24. **(Newly-Presented)** The image-forming process according to Claim 1, wherein the intermediate image transfer element is a belt.

~~16.~~ 25. **(Newly-Presented)** The image-forming process according to Claim 1, wherein the intermediate image transfer element is a roller.--

REMARKS

Favorable reconsideration and withdrawal of the objection and rejections set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

Initially, the time and courtesies extended by the Examiner in granting and conducting a telephone interview on January 27, 2003 with Applicants' attorneys are

acknowledged with appreciation. The issues raised in the Official Action and proposed responses discussed during that interview will be mentioned in these Remarks.

Claims 1 through 16 are now pending in the application. Claims 1 through 14 have been amended to even more succinctly define the invention and/or to improve their form. Claims 15 and 16 have been added to accord Applicants an additional scope of protection commensurate with the disclosure. It is respectfully submitted that no new matter has been added. Claims 1 and 8 are the only independent claims pending in the application.

The Examiner notes that essential subject matter may not be incorporated by reference; and further notes that Claims 7 and 14 were amended in the August 26, 2002 Amendment to include reference to a specific JIS by number, i.e., JIS B0601-1994. The Examiner considers the text of that JIS to be essential subject matter. Consequently, the Examiner indicates that the specification must be amended to include that text. (The original specification refers to the JIS by number.)

During the telephone interview, the Examiner said that either (1) the specification could be amended to include the text of the JIS or (2) the reference to the specific JIS can be deleted from Claims 7 and 14 *provided* it is demonstrated that one having ordinary skill in the art at the time the invention was made could practice the claimed invention without any elaboration of the requirements of the specific JIS being recited in the specification *per se*, i.e., the specific JIS was well-known in the art at the time the invention was made, for example, the specific JIS was commonly mentioned in technical publications and/or patents.

Applicants have chosen the latter of the above-mentioned two options. Specifically, Claims 7 and 14 have been amended to delete the reference to a specific JIS.

Applicants believe that JIS B0601-1994 was, in fact, well known in the art at the time the claimed invention was made. For example, in U.S. Patent No. 5,837,345, the paragraphs at column 5, lines 6-24 and column 30, lines 5-23 mention the JIS B0604 and that average surface roughness, Ra, is determined according to the center line average roughness defined in JIS B0601. U.S. Patent No. 5,342,784 mentions JIS B0604-1994 and uses Ra throughout, such as in three consecutive paragraphs beginning at column 4, line 57 and continuing through column 5,line 25 that discuss the arithmetical mean deviation of profile, or average roughness value Ra. These exemplary patents, which Applicants believe to demonstrate that the requirements of JIS B0601-1994 was known at least at the time the patents issued in 1998 and 1994, respectively, which is prior to the priority date of the present application. It is believed these patents demonstrate that one having ordinary skill in the art at the time the invention was made would have the knowledge required to practice the claimed invention.

Applicants are concurrently filing herewith an Information Disclosure Statement citing these two U.S. patents.

In view of the foregoing, it is respectfully submitted that any issue of improper incorporation by reference is now moot.

Claims 1 through 14 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in a manner so as to reasonably convey that the inventor(s) had possession of the claimed invention.

More specifically, the Examiner observed that Claims 1 and 8 in the August 26, 2002 Amendment were amended to recite a "substantially-cylindrical electroconductive substrate" and that Claim 1 was further amended to recite a "substantially-cylindrical intermediate image transfer member".

In Claims 1 and 8, the recitation "a substantially-cylindrical electroconductive substrate" has been amended to read --a *cylindrical* electroconductive substrate-- as recited in the original claims. Without conceding the propriety of the rejection, this amendment has been made solely to avoid this issue and to expedite prosecution.

The Examiner also noted that he has searched the claims based on the recitation "a *cylindrical* intermediate image transfer member", as recited in original Claim 1 rather than "a substantially cylindrical intermediate image transfer member". During the interview, it was noted that the specification at page 64, line 13 and page 70, lines 11 through 13 discusses that the intermediate image transfer member/element may be either a roller or a belt.

In Claim 1, the recitation "a substantially-cylindrical intermediate image transfer member" has been amended to read --a *cylindrical* intermediate image transfer *element*-- as recited in the original claim.

Claims 15 and 16 have been added to further describe the intermediate image transfer element of Claim 1 as being a belt (Claim 15) or a roller (Claim 16).

Claim 4 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claim 4 has been amended to depend from Claim 2 as

kindly suggested by the Examiner in the Official Action. It is respectfully submitted that this rejection has been overcome.

Additionally, Claim 4 has been amended to recite that the surface layer is composed of a material including "at least one of silicon *atoms* and carbon *atoms*". The Examiner indicated during the interview that this amendment would be acceptable.

During the interview, the Examiner also indicated certain other amendatory text is acceptable. For example, the recitation "intermediate image transfer *member*" in Claim 1 has been amended to read --intermediate image transfer *element*--. As above-noted, Claim 1 has been so amended. In addition, certain other amendments were discussed with the Examiner. These amendments involve semantics and style and need not be individually discussed.

Claims 2 through 7 and 9 through 16 depend either directly or indirectly from one or the other of independent Claims 1 and 8 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention. Individual consideration of the dependent claims is respectfully requested.

Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

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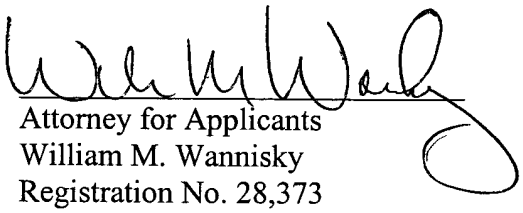
Claims 2 through 7 and 9 through 16 depend either directly or indirectly from one or the other of independent Claims 1 and 8 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention. Individual consideration of the dependent claims is respectfully requested.

Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,



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VERSION WITH MARKINGS SHOWING CHANGES MADE TO SPECIFICATION

The paragraph starting at page 36, line 13 and ending at page 36, line 27 has been amended, as follows.

--In the present invention, the average inclination Δa was measured with a surface roughness tester SE-3300 (trade name, manufactured by Kosaka Kenkyusho K.K.) by calculation according to the definition of the average inclination described in Handling Manual of this tester: Chapter 8, "Definition of terminologies and parameters for surface roughness", Paragraphs 8-12. Specifically, the average inclination Δa of the roughness curve having a length "ℓ", as shown in Fig. 5, is calculated according to Equation 4 below.

(Equation 4)

$$\Delta a = \frac{1}{\ell[1]}\int_0^{\ell[1]} \left|\frac{dy}{dx}\right| dx = \left(\frac{h_1 + h_2 + h_3 \ldots h_n}{\ell[1]}\right) - - .$$

VERSION WITH MARKINGS SHOWING CHANGES MADE TO CLAIMS

1. **(Twice Amended)** An image-forming process for use in an electrophotographic system employing an image forming apparatus equipped with a photosensitive member including a photoconductive layer composed of a silicon-based non-monocrystalline material and a surface layer composed of a non-monocrystalline material formed in the foregoing order on a peripheral surface [face] of a cylindrical [substantially-cylindrical] electroconductive substrate, and a cylindrical [substantially-cylindrical] intermediate image-transfer [image transfer] element [member] in contact with the [a] surface layer [of the photosensitive member], and rotating the photosensitive member and the intermediate image-transfer element [member] at a prescribed relative speed, said image-forming process comprising:

an electrifying step of electrifying the surface layer [of the photosensitive member];

a latent image-forming step of forming an electrostatic latent image by projection of light onto the electrified surface layer [electrified in said electrifying step];

a developing step for forming a toner image by providing [deposition of] a toner on the surface layer bearing the electrostatic latent image [formed by said latent image-forming step];

an image-transferring step for transferring the toner image [formed in said developing step] onto the intermediate image-transfer element [member]; [and]

repeating said electrifying step, said latent image-forming step, said developing step, and said transferring step a plurality of times to form a plurality of toner images in superposition on the intermediate image-transfer element [member]; and

a transferring step of transferring the toner images formed in superposition on the intermediate image-transfer element [member] onto a recording sheet,

wherein the photosensitive member and the intermediate image-transfer element [member] are brought into contact at a contact line [face] and at a contact temperature in a [the] range of 15°C to 60°C at the prescribed relative speed [of the photosensitive member to the intermediate image-transfer member] to achieve a kinetic frictional force deviation (a standard deviation of a kinetic frictional force), which is less than an average value of the kinetic frictional force.

2. **(Twice Amended)** The image-forming process according to claim 1, wherein a kinetic frictional deviation coefficient [factor] is not higher than 0.1, where [wherein] the kinetic frictional deviation coefficient [factor] is a rate of change of the kinetic frictional force deviation per unit length in a length direction along [of] the contact line [face] with a contacting linear pressure, and

wherein the contacting linear pressure is defined as a force applied to contact the photosensitive member with the intermediate image-transfer element [member] per unit length in the length direction [of the contact face].

3. **(Twice Amended)** The image-forming process according to claim 2, wherein a range of a variation of the kinetic frictional force deviation coefficient [factor] is not more than 0.02 for a change in [of] the contact temperature in the range of 15°C to 60°C.

4. **(Twice Amended)** The image-forming process according to claim 2 [1], wherein the surface layer of the photosensitive member is composed of a non-monocrystalline material including [based on] at least one of silicon atoms and carbon atoms, and

wherein a range of a variation of the [a] kinetic frictional deviation coefficient [factor] is not more than 0.01 for a change in [of] the contact temperature in the range of 15°C to 60°C.

5. **(Twice Amended)** The image-forming process according to claim 1, wherein a ratio [rate] of a change of a dark portion electrifiability [electrifying ability] to a change of temperature of the [a] surface layer [of the photosensitive member] is within ±2%/°C.

6. **(Twice Amended)** The image-forming process according to claim 5, wherein a characteristic energy of a tail of a valence band in an exponential energy distribution [of a tail level of a valence band] is in a [the] range of 50 to 70 meV.

7. **(Twice Amended)** The image-forming process according to claim 1, wherein a center-line average roughness Ra [according to JIS B0601-1994] of the surface layer [of the photosensitive member] is in a [the] range of 0.01 to 0.9 μm, and

wherein an [the] average inclination Δa of a roughness curve f(x) is in a [the] range of 0.001 to 0.06, as defined by the following equation:

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point [x] of [a] the curve extending a distance x in an X direction, and ℓ is a length of the curve.--

8. **(Twice Amended)** An image-forming process for an electrophotographic system employing an image-forming apparatus equipped with a plurality of photosensitive members, each of the plurality of photosensitive members including[, respectively,] a photoconductive layer composed of a silicon-based non-monocrystalline material and a surface layer composed of a non-monocrystalline material formed in the foregoing order on a peripheral face of a cylindrical [substantially-cylindrical] electroconductive substrate, and an image-transferring belt for holding and delivering a recording sheet with successive contact, respectively, with the [surfaces of the] plurality of photosensitive members, and moving the plurality of photosensitive members

and the recording sheet at a prescribed relative speed, the image-forming [image forming] process comprising:

an electrifying step of electrifying the [a] surface layer of one of the plurality of photosensitive members;

a latent image-forming step of forming an electrostatic latent image by projection of light onto the electrified surface layer [electrified in said electrifying step];

a developing step for forming a toner image by providing [deposition of] a toner on the surface layer bearing the electrostatic latent image [formed in said latent image-forming step];

an image-transferring step for transferring the toner image [formed in said developing step] onto the recording sheet; and

repeating said electrifying step, said latent image-forming step, said developing step, and said image-transferring step [for each of a remaining plurality of photosensitive members] to form a plurality of toner images in superposition on the recording sheet,

wherein the plurality of photosensitive members, respectively, [member] and the recording sheet are brought into contact at a contact line [face] and at a contact temperature in a [the] range of 15°C to 60°C at the prescribed relative speed [of the photosensitive member to the recording sheet] to achieve a kinetic frictional force deviation (a standard deviation of a kinetic frictional force), which is less than an average value of the kinetic frictional force.

9. **(Twice Amended)** The image-forming process according to claim 8, wherein a kinetic frictional deviation coefficient [factor] is not higher than 0.1, where a kinetic frictional deviation coefficient [factor] is a rate of a change of a ratio of the kinetic frictional force deviation per unit length in a length direction along [of] the contact line [face] with a contacting linear pressure,

wherein the contacting linear pressure is defined as a force applied to contact each of the plurality of photosensitive members [member] with the recording sheet per unit length in the length direction [of the contact face].

10. **(Twice Amended)** The image-forming process according to claim 9, wherein a range of variation of the kinetic frictional force deviation coefficient [factor] is not more than 0.02 for a change in [of] the contact temperature in the range of 15°C to 60°C.

11. **(Twice Amended)** The image-forming process according to claim 9, wherein the surface layer of the photosensitive member is composed of a non-monocrystalline material including [based on] at least one of silicon atoms and carbon atoms, and

wherein a range of a variation of the kinetic frictional deviation coefficient [factor] is not more than 0.01 for a change in [of] the contact temperature in the range of 15°C to 60°C.

12. **(Twice Amended)** The image-forming process according to claim 8, wherein a ratio [rate] of change of a dark portion electrifiability [electrifying ability] to a change in temperature of the [a] surface layer [of the photosensitive member] is within ±2%/°C.

13. **(Twice Amended)** The image-forming process according to claim 12, wherein a characteristic energy of a tail of a valence band in an exponential energy distribution [of a tail level of a valence band] is in a [the] range of 50 to 70 meV.

14. **(Twice Amended)** The image-forming process according to claim 8, wherein an [a center-line] average roughness Ra [according to JIS B0601-1994] of a center line of the surface layer [of the photosensitive member] is in a [the] range of 0.01 to 0.9 μm, and

wherein an [the] average inclination Δa of a roughness curve f(x) is in a [the] range of 0.001 to 0.06, as defined by the following equation:

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point [x] of a curve extending a distance x in an X direction, and ℓ is a length of the curve.